transmission of packet data according to embodiment 2 of the present invention. This embodiment 2 is for more specifically explaining the embodiment 1.

A transmitting station constituted by the mobile station 1 or the base station 2 divides packet data A, B, C, ... relating to one call into, for example, as shown in Fig. 4A, a plurality of frames (A-1, A-2, A-3, A-4), (B-1, B-2, B-3), (C-1, C-2, C-3, C-4, C-5, C-6, C-7), respectively. Besides, as shown in Figs. 4B, 4C, 4D, and 4E, the transmitting station assigns a first data channel DCH1, a second data channel DCH2, a third data channel DCH3 and a fourth data channel DCH4 using four spread codes C1, C2, C3 and C4 to the packet data A, B, C, ... relating to the one call. The number of the spread codes, that is, the number of the data channels is previously set as a multicode number Ccode. In the example of Fig. 4, the multicode number Ccode is set to 4.

The transmitting station transmits the plurality of generated frames by using any of the first to fourth data channels DCH1 to DCH4. In this case, the transmitting station makes transmission start timing different for every data channel DCH. At this time, the number of channels which come to have the same transmission start timing, that is, the number of spread codes is previously set as a simultaneous processing code number Cnum. In the example of Fig. 4, the simultaneous processing code number Cnum is set to 1. A delay width of the

transmission start timing is previously set in frame units. More specifically, the delay width of the transmission start timing is previously set as a delay frame number Cfrm. The delay frame number Cfrm is determined based on, for example, a time necessary for following transmission power control using the TPC symbol in connection with the increase of interference power caused by increasing the multicode number Ccode by one. In the example of Fig. 4, the delay frame number Cfrm is set to 1.

More particularly, in the case where packet data is generated, the transmitting station starts transmission of one dummy frame dmy through the first data channel DCH1 in response to a reference timing corresponding to a data transmission timing immediately after the generation of the data. Incidentally, the dummy frame dmy may be two or more frames. Next, the transmitting station transmits data frames relating to the packet data through the first data channel DCH1 in response to the end of the transmission of the dummy frame dmy. Besides, the transmitting station starts transmission of one dummy frame dmy through the second data channel DCH2 in response to the passage of one frame from the transmission start of the dummy frame dmy through the first data channel DCH1. Then, the transmitting station transmits data frames subsequently to the dummy frame through the second data channel DCH2.

Further, the transmitting station starts transmission

of one dummy frame dmy through the third data channel DCH3 in response to the passage of one frame from the transmission start of the dummy frame dmy through the second data channel DCH2, and starts transmission of data frames subsequently to the dummy frame dmy. Furthermore, the transmitting station starts transmission of one dummy frame dmy through the fourth data channel DCH4 in response to the passage of one frame from the transmission start of the dummy frame dmy through the third data channel DCH3, and starts transmission of data frames subsequently to the dummy frame dmy.

Figs. 5A to 5E are views for explaining multicode transmission of packet data in the case where the delay frame number Cfrm is set to 2. That is, the transmitting station starts transmission relating to the second data channel DCH2 when two frames have passed after transmission relating to the first data channel DCH1 is started. Subsequently, also in the third data channel DCH3 and the fourth data channel DCH4, in the same way, transmission is started in response to a timing when two frames have passed from the transmission start of a dummy frame dmy through the second data channel DCH2, and a timing when two frames have passed from the transmission start of a dummy frame dmy through the third data channel DCH3.

Figs. 6A to 6E are views for explaining multicode transmission of packet data in the case where the delay frame number Cfrm is set to 3, and the simultaneous processing code